

Scope of work for Supply & Retro-fitment of 400kV & 220 kV Circuit Breakers in NERTS

The scope of work under the subject package covers Supply & Retro-fitment of 400kV & 220 kV Circuit Breakers as specified in detailed BOQ & technical specification on FOR destination basis.

Supply portion:

Supply of Circuit Breakers as per BOQ and technical specifications complete in all respects.

The CB shall be complete with support structure, terminal connectors, operating mechanism, control cabinets, piping, inter pole cables, cable accessories like glands, terminal blocks, marking ferrules, lugs, pressure gauges, density monitors (with graduated scale), galvanized support structure for CB and control cabinets, their foundation bolts, if required, and all other accessories required for carrying out all the functions the CB is required to perform.

Service portion:

Erection, testing and commissioning of 400 kV & 220 kV SF6 Gas Circuit Breaker, interalia, including the following activities (complete in all respect as per technical specification) at various substation: -

1. For erection of new breaker existing foundation for CB is to be utilized. Any modification/preparation required in the existing foundation or new foundation may also be considered, with approval of POWERGRID. In case of a new foundation, proper compaction of earth to be ensured. No additional charges to be paid by POWERGRID for any new foundation.
2. **Proper PTW shall be taken prior to any work in the switchyard. Safety Plan to be submitted as per POWERGRID format and designated Safety officer to be deployed for erection.**
3. **Removal of SF6 gas from existing breakers before dismantling The scope of dismantling shall include existing breaker along with accessories and structures.**
4. Removing of Termination of existing cable between control room & Marshalling Box, (removing from MB with proper identification) and reconnecting as per prevailing scheme. Removing of inter phase cabling etc and connection of new inter pole cables.
5. Erection, testing & commissioning of new CB including earthing and supply of terminal connectors. **The supply of earthing materials and Terminal Connectors shall be in the scope of bidder. The details of existing Terminal connectors have been attached separately as Annexure-I. Party to supply new Terminal connectors suitable for existing conductors/ Pipes as applicable.**
6. **Utmost care must be taken by manufacturer to adhere to the present Rating of Coil Voltage and contactors as mentioned in Annexure-I**
7. Arrangement of adequate capacity of Hydra/ Crane suitable for lifting breakers and structures. Providing other tools/ tackles/ slings/ wire ropes etc shall also be in the scope of supplier.
8. Fixing of IPS tubes etc. as applicable.

9. Shifting of dismantled breakers to the place suggested by POWERGRID in same substation premise.
10. The SF6 Gas Handling plant to be provided by POWERGRID.
11. Storage cum erection insurance of the equipment is in the scope of bidder.
12. Advance planning for shutdown to be done and timely request (1st week of the current month) should be sent to POWERGRID site for approval in OCC meeting for shutdown in the next month for retrofitting work.
13. As per clause no. 12.(xii) of Technical Specification , complete set of Transducers/Fixtures for travel measurement of complete 3-phase CB and one set of gas filling adopter (Including coupling, regulator, connecting hose pipe up to ground level) for each station (POWERGRID as well as other utility) shall be supplied by CB manufacturer.

For any further information i.e. existing CB Drawing, Foundation drawing, Terminal connector details, General arrangement of station etc, bidder may visit the site.

The above said scope of work is only indicative; the scope of work shall also include all such items which are not specifically mentioned in the scope of work but necessary for successful, efficient and reliable performance of the equipment.

**** The bidder is advised to visit the site before submission of bids.***